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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,851	03/22/2006	Mohammed Salah-Edlin Imbabi	P29599	9263
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EXAMINER CAJILIG, CHRISTINE T				
ART UNIT 3633		PAPER NUMBER		
NOTIFICATION DATE 02/05/2010		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary****Application No.**

10/572,851

**Applicant(s)**

IMBABI, MOHAMMED SALAH-EDLIN

**Examiner**

CHRISTINE T. CAJILIG

**Art Unit**

3633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 66 is/are allowed.
- 6) ☒ Claim(s) 36-65 and 67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claims 52 and 54 are objected to because of the following informalities: The claims should state "the intermediate cladding layer" instead of "cladding layer" or "intermediate layer." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 42-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 42-45 recites the limitation "said breathing wall panel." There is insufficient antecedent basis for this limitation in the claim. Claim 36, which claims 42-45 refer to, does not recite "a breathing wall panel." Does Applicant intend to recite "said air permeable panels?"

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 36, 38-41, 46, 51, 53, 55, 62, 64, 64, and 67 are rejected under 35

U.S.C. 102(b) as being anticipated by Morimoto (U.S. Patent No. 5,192,624).

Regarding claims 36, 38, 46, and 67, Morimoto discloses an air permeable panel (16) engaging an intermediate cladding layer (14) having filtering characteristics, the air permeable panel supporting the intermediate cladding layer and comprising: a plurality of hollowed projections (wall opposite of 20 and engaging 14)) interconnected in a lattice configuration, said projections each having a tip portion (a), the respective tip portions being arranged to face in a common direction to engage with the intermediate cladding layer, each said projection further having a base periphery (where 20 is defined) at which adjacent projections are interconnected, the base peripheries being interconnected such that apertures (20) are defined between the base peripheries in the lattice configuration.

Regarding claim 39, Morimoto further discloses that the projections are configured to restrict penetration thereof into the intermediate cladding layer.

Regarding claim 40, Morimoto further discloses that the cross-sectional area of each projection increases along its longitudinal axis away from their tip portion.

Regarding claim 41, Morimoto further discloses a building cladding system incorporating an air permeable panel according to claim 36; comprising a second air

permeable panel (Col 7, Ln 9-15) wherein the air permeable panels are provided on both faces of said intermediate cladding.

Regarding claim 51, Morimoto further discloses that the intermediate cladding layer has at least one of thermal insulating properties and sound insulating properties.

Regarding claim 53, Morimoto further discloses that the intermediate cladding layer is provided in the form of fibers.

Regarding claim 55, Morimoto further discloses that the intermediate cladding layer is provided in the form of one or more panel units.

Regarding claim 62, Morimoto further discloses that the air permeable panel is pressed from a single sheet.

Regarding claim 64, Morimoto further discloses that the air permeable panel is formed for a fire retardant material (metal).

Regarding claim 65, Morimoto further discloses wherein in use with the hollowed elements at or adjacent the intermediate layer, the apertures present an opening of expanding volume onto the intermediate layer.

Claims 36-40, 42-44, 46-48, 51, 52, 55, 56, and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Matias et al. (U.S. Patent No. 6,966,402).

Regarding claims 36, 38, 46, 47, and 67, Matias et al. discloses an air permeable panel (20) engaging an intermediate cladding layer (18) having filtering characteristics, the air permeable panel supporting the intermediate cladding layer and comprising: a plurality of hollowed pointed projections (Fig 3b,3c) interconnected in a lattice

configuration, said projections each having a tip portion, the respective tip portions being arranged to face in a common direction to engage with the intermediate cladding layer, each said projection further having a base periphery at which adjacent projections are interconnected, the base peripheries being interconnected such that apertures (34) are defined between the base peripheries in the lattice configuration.

Regarding claims 37 and 48, Matias et al. further discloses that said projections have a pyramidal form.

Regarding claim 39, Matias et al. further discloses that the projections (Fig 3c) are configured to restrict penetration thereof into the intermediate cladding layer.

Regarding claim 40, Matias et al. further discloses that the cross-sectional area of each projection increases along its longitudinal axis away from their tip.

Regarding claim 42, Matias et al. discloses a building cladding system comprising an air permeable panel according to claim 36 and a first wall member (12/16), wherein said first wall member is for forming a wall of a building's envelope and wherein said air permeable panel is located adjacent to the first wall member and is coupled thereto (via 46).

Regarding claim 43, Matias et al. further discloses a second wall member (14), said second wall member for forming an external wall of the building's envelope, wherein said first wall member forms an internal wall of the building's envelope, and wherein said air permeable panel is provided between said internal and external wall members.

Regarding claim 44, Matias et al. further discloses one or more edge members (54) configured to interconnect adjacent air permeable wall panels.

Regarding claim 51, Matias et al. further discloses that the intermediate cladding layer has at least one of thermal insulating properties and sound insulating properties.

Regarding claim 52, Matias et al. further discloses that the intermediate cladding layer comprises mineral wool.

Regarding claims 55 and 56, Matias et al. further discloses that the intermediate cladding layer is provided in the form of panel units and is provided in modular format.

Claims 46 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Richerson et al. (U.S. Patent No. 6,966,402).

Regarding claim 46, Richerson et al. discloses an air permeable panel (66) engaging with an intermediate cladding layer (90) having filtering characteristics, the air permeable panel supporting the intermediate cladding layer by engaging with it, said air permeable panel comprising a plurality of hollowed elements (70) interconnected in a planar lattice arrangement, said hollowed elements facing in a common direction and being interspersed with apertures, the hollowed elements being interconnected at their base peripheries to define said apertures (72) therebetween.

Regarding claim 54, Richerson et al. further discloses that the intermediate cladding layer comprises filtering materials for particulate emissions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49, 50, and 57-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richerson et al. in view of Rammig et al. (U.S. Patent No. 6,966,939).

Regarding claims 49, 50, and 57-61, Richerson does not disclose that the intermediate cladding layer has a graduated filtering profile to as to trap relatively large particles toward an outer surface and to trap relatively smaller particles toward the inner surface, the intermediate cladding layer formed from a plurality of one or more separate replaceable disposable filter layers with different filtering characteristics to define a substantially complete filter spectrum.

Rammig et al. discloses filter element made of separate replaceable filter layers (A-G) which progressively filters large to small particles.

It would have been obvious to a person having ordinary skill in the art at the time of the Applicant's to modify Richerson et al. to have a graduated filtering profile structured as taught by Rammig et al. to provide the predictable result of providing a filter with improved filtering characteristics.

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matias et al.



Regarding claim 63, Matias et al. does not disclose that the air permeable panel is molded from plastic material. It would have been obvious to one having ordinary skill in the art at the time of invention to use plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Plastic would provide a durable, rust resistant material.

#### ***Allowable Subject Matter***

Claim 45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 66 is allowed.

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday-Thursday, 9 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./

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Examiner, Art Unit 3633

/Robert J Canfield/  
for D. Dunn, SPE of Art Unit 3633